

STATE OF SOUTH CAROLINA

(Caption of Case)

Annual Review of Purchased Gas Adjustment and
Gas Purchasing Policies of Piedmont Natural Gas
Company, Incorporated

BEFORE THE
PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

COVER SHEET

DOCKET

NUMBER: 2009 - 4 - G

(Please type or print)

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DOCKETING INFORMATION (Check all that apply)

☐ Emergency Relief demanded in petition ☐ Request for item to be placed on Commission's Agenda expeditiously

☒ Other: Prefiled Testimony of Keith P. Maust, Robert L. Thornton, and William C. Williams

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)		
<input type="checkbox"/> Electric	<input type="checkbox"/> Affidavit	<input type="checkbox"/> Letter	<input type="checkbox"/> Request
<input type="checkbox"/> Electric/Gas	<input type="checkbox"/> Agreement	<input type="checkbox"/> Memorandum	<input type="checkbox"/> Request for Certificatio
<input type="checkbox"/> Electric/Telecommunications	<input type="checkbox"/> Answer	<input type="checkbox"/> Motion	<input type="checkbox"/> Request for Investigation
<input type="checkbox"/> Electric/Water	<input type="checkbox"/> Appellate Review	<input type="checkbox"/> Objection	<input type="checkbox"/> Resale Agreement
<input type="checkbox"/> Electric/Water/Telecom.	<input type="checkbox"/> Application	<input type="checkbox"/> Petition	<input type="checkbox"/> Resale Amendment
<input type="checkbox"/> Electric/Water/Sewer	<input type="checkbox"/> Brief	<input type="checkbox"/> Petition for Reconsideration	<input type="checkbox"/> Reservation Letter
<input checked="" type="checkbox"/> Gas	<input type="checkbox"/> Certificate	<input type="checkbox"/> Petition for Rulemaking	<input type="checkbox"/> Response
<input type="checkbox"/> Railroad	<input type="checkbox"/> Comments	<input type="checkbox"/> Petition for Rule to Show Cause	<input type="checkbox"/> Response to Discovery
<input type="checkbox"/> Sewer	<input type="checkbox"/> Complaint	<input type="checkbox"/> Petition to Intervene	<input type="checkbox"/> Return to Petition
<input type="checkbox"/> Telecommunications	<input type="checkbox"/> Consent Order	<input type="checkbox"/> Petition to Intervene Out of Time	<input type="checkbox"/> Stipulation
<input type="checkbox"/> Transportation	<input type="checkbox"/> Discovery	<input checked="" type="checkbox"/> Prefiled Testimony	<input type="checkbox"/> Subpoena
<input type="checkbox"/> Water	<input type="checkbox"/> Exhibit	<input type="checkbox"/> Promotion	<input type="checkbox"/> Tariff
<input type="checkbox"/> Water/Sewer	<input type="checkbox"/> Expedited Consideration	<input type="checkbox"/> Proposed Order	<input type="checkbox"/> Other:
<input type="checkbox"/> Administrative Matter	<input type="checkbox"/> Interconnection Agreement	<input type="checkbox"/> Protest	
<input type="checkbox"/> Other:	<input type="checkbox"/> Interconnection Amendment	<input type="checkbox"/> Publisher's Affidavit	
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**Before the
Public Service Commission of South Carolina**

Docket No. 2009-4-G

**Annual Review of Purchased Gas Adjustment
and Gas Purchasing Policies of
Piedmont Natural Gas Company, Inc.**

**Testimony
of
Keith P. Maust

On Behalf Of
Piedmont Natural Gas Company, Inc.**



June 11, 2009

1 **Q. Please state your name and your business address.**

2 A. My name is Keith P. Maust. My business address is 4720 Piedmont Row
3 Drive, Charlotte, North Carolina.

4 **Q. By whom and in what capacity are you employed?**

5 A. I am employed by Piedmont Natural Gas Company, Inc., (Piedmont) as
6 Managing Director, Gas Supply and Scheduling.

7 **Q. Please describe your educational and professional background.**

8 A. I graduated from West Virginia University in 1976 with a Bachelor's
9 Degree in Business Administration. I was employed by Tennessee Gas
10 Pipeline for five years from 1983 to 1988 as an Analyst in the Gas Reserves
11 and Gas Supply departments. I joined Piedmont as a Gas Supply Analyst in
12 July, 1988. I was promoted to Manager of Gas Supply in 1991 and Director
13 of Gas Supply in 1995. In 1996 I was promoted to Director of Gas Supply
14 and Wholesale Marketing. I was promoted to Managing Director, Gas
15 Supply and Scheduling in 2006.

16 **Q. Please describe the scope of your present responsibilities for Piedmont?**

17 A. My current major responsibilities include supervision of long and short-term
18 purchasing and scheduling of gas supply and gas cost management
19 activities.

20 **Q. Have you previously testified before this Commission or any other
21 regulatory authority?**

22 A. Yes, I have presented testimony beginning in 1997 through 2008 and appeared
23 as a witness before this Commission in the matter of the Commission's annual
24 review of Piedmont's Gas Costs and Purchasing Policies (Dockets No.97-007-
25 G, 98-004-G, 99-004-G, 2000-004-G, 2001-004-G, 2002-004-G, 2003-004-G,
26 2004-004-G, 2005-005-G, 2006-4-G, 2007-4-G and 2008-4-G) and in the

1 matter of Piedmont's approved hedging policy (Docket No. 2001-410-G). I
2 have also presented testimony and appeared as a witness before the North
3 Carolina Utilities Commission (NCUC) regarding Piedmont's gas purchasing
4 policies and proposed hedging plan and presented testimony before the
5 Tennessee Regulatory Authority (TRA) regarding Nashville Gas Company's
6 Incentive Plan Account.

7 **Q. What is the purpose of your testimony in this proceeding?**

8 A. My testimony will describe Piedmont's gas purchasing policies. This testimony
9 is in response to the Commission's directive issued in Order No. 88-294 dated
10 April 6, 1988 requiring ". . . annual public hearings . . . to review the
11 Company's . . . gas purchasing policies" and in response to the Commission's
12 Order establishing pre-filing deadlines in this docket.

13 **Q. What is the period of review in this docket?**

14 A. The review period is April 1, 2008 through March 31, 2009.

15 **Q. Please explain Piedmont's gas purchasing policies.**

16 A. Piedmont has previously utilized and continues to maintain a "best cost" gas
17 purchasing policy. This policy consists of five main components -- the price of
18 the gas, the security of the gas supply, the flexibility of the gas supply, gas
19 deliverability and supplier relations. All of these components are interrelated,
20 and we will continue to weigh the relative importance of each of these factors
21 when developing an overall gas supply portfolio to meet the needs of our
22 customers.

23 **Q. Please describe each of the five components.**

24 A. The "price of the gas" refers to the delivered cost of gas to Piedmont's city
25 gate. In order to properly judge prices at a comparable transaction point,
26 Piedmont evaluates purchase prices at the pipeline city gate points of delivery
27 into Piedmont's distribution facilities. With the unbundling of the interstate

1 pipeline industry, substantial flexibility exists in structuring gas supply
2 arrangements. The majority of Piedmont's supply purchases take place at
3 "pooling points" into the pipeline on which Piedmont holds firm transportation
4 capacity rights. These "pooling point" supply purchases from producers and
5 marketers include the commodity cost of gas at the pooling points and the fuel
6 to be retained by the downstream pipeline transporter. Commodity
7 transportation charges are also assessed separately by pipelines. Any "best
8 cost" analysis that solely considered supply area or "pooling point" cost would
9 fail to recognize the varying cost in fuel and commodity costs associated with
10 transporting gas purchased from different supply area locations to Piedmont's
11 city gate. In the case of "bundled" city gate supply purchases, Piedmont may
12 pay the gas supplier an all-inclusive price that covers the cost of gas, fuel and
13 transportation charges. Of course, peaking and storage services may add
14 additional injection, withdrawal, and related fuel charges to the city gate cost of
15 gas. All of these cost components must be taken into account in evaluating the
16 "price of the gas."

17 "Security of gas supply" refers to the assurances that the supply of gas
18 will be available when needed. Obviously, it is important to maintain a high
19 level of supply security for Piedmont's firm customers who have no alternate
20 fuel capability. Security of gas supply is less important for our interruptible
21 customers who have access to alternate fuels. In order to reserve firm gas
22 supplies under contract, fixed reservation fees are generally required in addition
23 to the commodity cost of gas. In addition, the geographic source of supply, the
24 nature of the supplier's portfolio of gas supplies (especially during critical
25 conditions) and negotiated contract terms must be considered when evaluating
26 the level of supply security. Thus, the security of gas supply is interrelated with

1 the price of gas and the other components of Piedmont's "best cost" purchasing
2 policy.

3 "Flexibility of gas supply" refers to our ability to adjust the volume of
4 a particular gas supply as operating and market conditions change from time to
5 time. For example, firm heat sensitive customers will vary their consumption
6 depending on the weather conditions in Piedmont's service area. Interruptible
7 customers will vary their level of purchase depending on the price of alternate
8 fuels and the demand for product in their own industry. Thus, Piedmont must
9 arrange a portfolio of gas supplies and storage service flexible enough to meet
10 the daily and monthly "swings" in the market place. Contractual gas supply
11 "swing rights" are implemented through periodic renominations with gas
12 suppliers and through injections into and withdrawals from storage.

13 "Gas deliverability" refers to the ability to obtain Piedmont's gas
14 supplies at the city gate through reliable transportation and storage capacity
15 arrangements. The unbundling of the interstate pipeline industry has created a
16 complex system of multiple pipeline services and service combinations.
17 Transportation arrangements can involve supply area gathering services,
18 intrastate transportation, interstate lateral line and pooling services, multiple
19 interstate pipeline transportation and storage arrangements, and balancing and
20 peaking services. The marketplace for pipeline capacity service is static, with
21 little to no unused capacity available during periods of design temperature
22 conditions. Consequently, it is important that we secure and maintain firm
23 transportation and storage capacity rights to ensure the deliverability of our gas
24 supplies to meet the design day, seasonal, and annual needs of our customers.
25 Of course, pipeline capacity contracts require the payment of fixed demand
26 charges to reserve firm transportation or storage entitlements. Piedmont is
27 active in proceedings at the Federal Energy Regulatory Commission (FERC)

1 not only with respect to the level of pipeline charges under these contracts, but
2 also the tariff terms and conditions that apply to these pipeline services.

3 "Supplier relations" refers to the dependability, integrity and
4 flexibility of a particular gas supplier. We contract with gas suppliers who have
5 a reputation of honoring their contractual commitments and have proven
6 themselves as reliable suppliers. Conversely, we avoid suppliers which have a
7 reputation of defaulting on contract obligations or who unilaterally interpret
8 contracts to their advantage. We prefer to deal with suppliers who are
9 constantly looking for ways to improve service and offer "win-win" solutions
10 for meeting customer needs.

11 **Q. Please describe the arrangements under which Piedmont purchases gas.**

12 A. Piedmont purchases gas supplies under a diverse portfolio of contractual
13 arrangements with a number of reputable gas producers and marketers. In
14 general, under Piedmont's firm gas supply contracts, Piedmont pays negotiated
15 reservation fees for the right to reserve and call on firm supply service up to a
16 maximum daily contract quantity (nominated either on a monthly or daily
17 basis), with market-based commodity prices tied to indices published in
18 industry trade publications. These firm contracts range in term from one year
19 (or less) to terms extending into 2012. Longer term contracts may provide for
20 periodic reservation fee renegotiations. Some of these contracts are for winter
21 only (peaking or seasonal) service and some provide for 365 day (annual)
22 service. Firm gas supplies are purchased for reliability and security of service
23 and are generally priced on a reservation fee basis according to the amount of
24 nomination flexibility built into the contract (daily swing service being more
25 expensive than monthly baseload service). When existing supply contracts
26 expire, requests for proposals are sent, as needed, to suppliers meeting
27 Piedmont's "best cost" purchasing policy requirements as detailed earlier in my

1 testimony. Firm supplies are then contracted from suppliers whose proposals
2 best fulfill Piedmont's "best cost" purchasing policy.

3 Piedmont also purchases gas supplies in the spot market under
4 contract terms of one month or less. These contracts provide for little or no
5 supply security in that they are interruptible and short term in nature. As a
6 result, Piedmont relies on these contracts primarily for interruptible markets
7 during off-peak periods when spot supplies are more abundant and for
8 supplemental system balancing requirements. Because of the nature of spot
9 contracts, these supplies do not command reservation fees and are priced on a
10 commodity basis, generally by reference to industry index or negotiated prices.

11 **Q. How does the interrelationship of the five factors described above**
12 **determine the character of the supply and capacity contracts under your**
13 **"best cost" policy?**

14 A. Under our "best cost" policy, we attempt to secure and maintain a supply
15 portfolio that is in balance with the requirements of our sales markets. Because
16 our firm sales market must have a secure and reliable gas supply, we meet the
17 needs of this market primarily with long-term firm supply and transportation
18 contracts, supplemented by storage and peaking services. The temperature
19 sensitivity of the firm market necessitates that flexibility of supply and storage
20 also be provided. As mentioned earlier, firm supply contracts demand a
21 premium payment, typically in the form of fixed reservation fees. Also, firm
22 supply contracts with flexibility of swing service entitlements will command a
23 higher price than baseload arrangements. Because our interruptible market is
24 more price sensitive and requires less supply security, we supply this market
25 with off-peak firm gas supply and transportation services when the core market
26 demand declines and through the purchase of gas supplies in the spot market.

1 In short, before entering into any agreement to purchase gas or pipeline
2 capacity, we carefully consider the use for the supply and weigh the five "best
3 cost" factors (price, security, deliverability, flexibility, and supplier relations).
4 Obviously, a great deal of judgement is required when weighing these factors.
5 To help us exercise this judgement, we try to keep informed about all aspects of
6 the natural gas industry. We intervene in all major FERC proceedings
7 involving our pipeline transporters, stay in constant contact with our existing
8 and potential suppliers, monitor gas prices on a real-time basis, subscribe to
9 industry literature, follow supply and demand developments, and attend
10 industry seminars.

11 **Q. What is your greatest challenge in applying your "best cost" gas**
12 **purchasing policy?**

13 **A.** Since most major gas supply decisions require a considerable degree of
14 planning and must be made years in advance of service, our greatest challenge
15 is dealing with future uncertainties in a dynamic national and regional energy
16 market. In a perfect world, we would be able to accurately predict our future
17 demand for gas, the future availability and pricing of gas supplies and capacity,
18 and future regulatory policies. Of course, in the real world, we cannot
19 accurately predict any of these factors. Future demand for gas is affected by
20 economic conditions, customer conservation efforts, weather patterns,
21 regulatory policies and industry restructuring in the energy markets. The future
22 availability and pricing of gas supplies will be affected by overall demand, oil
23 and gas exploration and development, pipeline expansion projects, and
24 regulatory policies and approvals.

25 **Q. Please explain the Company's position regarding the current U.S. supply**
26 **situation.**

1 A. The United States had been struggling to avoid a gradual decline in natural gas
2 production, with prices for future delivery on the NYMEX reaching a peak of
3 \$14.516 for January 2009 supply on July 3, 2008, with the 12 month futures
4 strip averaging \$13.334 on the same date. Spurred by the huge increase in
5 prices, producers increased their investment in new production, doubling the rig
6 count and outlaying capital for lease acquisitions in unconventional gas plays
7 like the Marcellus, Haynesville, Fayetteville, Woodford and Barnett Shales.
8 Due to the prolific increase in production from the dramatic increase in drilling
9 rigs, new production from shale plays and a drastic reduction in demand due to
10 the global recession, the country is now in the midst of a gas bubble less than
11 12 months later. Coupled with the anticipated summer increase of LNG
12 imports due to the global increase in liquifaction capability and reduced global
13 demand for LNG, prices could drop further. Prices for the NYMEX 12 month
14 strip reached a low of \$4.775 on February 20th, rebounded to a high of \$6.228
15 on May 12th and are currently at \$5.875 as of May 29th. Due to the current low
16 price environment and credit crunch, producers have substantially reduced their
17 drilling activity in an attempt to modify the supply-demand imbalance and
18 increase prices. The only thing that seems certain is that price volatility will
19 continue.

20 **Q. Has electric generation fueled by natural gas affected the price of natural**
21 **gas?**

22 A. Yes. Hotter than normal weather and the resulting increase in electrical
23 demand supplied by natural gas fueled generation contributes to increased
24 volatility and pricing of natural gas. Because of its environmentally friendly
25 nature, additional electric generation facilities fueled by natural gas continue to
26 be built in lieu of other energy source alternatives. It is only logical to assume

1 that natural gas prices will be affected by the corresponding increased
2 consumption of natural gas used for electric generation.

3 **Q. Please explain the factors that the Company evaluates in determining the**
4 **pricing basis for its gas supply contracts. Please discuss the various pricing**
5 **alternatives available, such as fixed prices, monthly market indexing and**
6 **daily spot market pricing and describe how supplier reservation charges**
7 **and discounts or premiums from market prices enter into the evaluation.**

8 **A.** The Company has various pricing options available to it when developing its
9 gas supply portfolio. These options include fixed pricing, monthly market
10 indexing and daily spot pricing. Fixed pricing scenarios are addressed in the
11 Company's hedging plan, which has been approved by the Commission. The
12 reservation fee the Company pays for each contract in its firm supply portfolio
13 is dependent upon the pricing options chosen and the supply flexibility
14 requirements associated with each contract. Reservation fees are generally
15 lower for base load supplies (purchased at a constant volume for the entire
16 month) and higher if swing service is required. Reservation fees vary
17 depending on the type of swing service being provided. Examples of factors
18 which affect the cost of swing service are: a) the number of days of swing
19 required; b) the volume of swing allowed; c) commodity pricing at first of the
20 month indices versus daily spot pricing; d) first of the month keep whole
21 pricing; e) intraday versus interday swing capabilities; and f) location of the
22 supply being purchased. The Company considers its anticipated load factor and
23 swing requirements under various weather scenarios, measuring the exposure to
24 price fluctuations of the spot market and the factors listed above and makes a
25 "best cost" purchasing decision.

26 **Q. Please describe how the Company determines the daily contract quantity**
27 **of gas supplies that should be acquired through long-term contracts for the**

1 **whole year, the full winter season and periods less than a full winter**
2 **season.**

3 A. The Company will purchase gas supplies on a year around basis to fulfill its
4 firm requirements including storage injections and to minimize supply costs
5 utilized to serve both firm and interruptible markets. Some of these contracts
6 will escalate in volume during shoulder months and the winter period
7 (November through March) as the Company's firm requirements increase due
8 to colder weather, thus sculpting year around contracts to fit seasonal needs.
9 The Company also purchases volumes for the winter period to match its firm
10 transportation capacity entitlements, which also increase during the winter
11 period. Lastly, the Company may purchase short-term city gate peaking supply
12 to fulfill additional firm obligations as the company experiences peak day firm
13 demand requirements. The company reviews warm winter weather scenarios to
14 measure its ability to fulfill its contractual purchase commitments with
15 suppliers.

16 **Q. Please explain the provisions in the Company's gas supply contracts that**
17 **allow or help facilitate future renegotiation efforts if future market**
18 **conditions offer new opportunities and describe any contractual restraints**
19 **that prevented the Company from obtaining the full benefit of favorable**
20 **spot market conditions during the review period.**

21 A. All of the Company's supply contracts have market-based commodity prices
22 tied to indices published in industry trade publications. These commodity
23 pricing provisions allow the Company to obtain the full benefit of market
24 priced gas.

25 **Q. What process does the Company employ in selecting its firm gas suppliers?**

26 A. The Company identifies the volume and type of supply that it needs to fulfill its
27 market requirements and solicits requests for proposals (RFP's) from a list of

1 suppliers that the gas supply department continuously updates as potential
2 suppliers enter and leave the market place. As mentioned earlier, type of
3 supply is classified as baseload or swing and firm or interruptible. Requests for
4 proposals for swing supply may be further categorized into pricing based on
5 first of the month indices, keep whole, or daily market indices. Swing supplies
6 priced at first of the month indices command the highest reservation fees
7 because suppliers incur all the risk associated with market volatility during the
8 delivery period. Keep whole contracts require the Company to reimburse
9 suppliers for the difference between first of the month index prices and lower
10 daily market prices if the Company doesn't take its full contractual volume.
11 Because the Company assumes the volatility risk associated with falling prices,
12 a lower reservation fee is warranted. Lower reservation fees are also associated
13 with swing contracts based upon daily market conditions because both buyer
14 and seller assume the risk of daily market volatility. After forecasting the load
15 factor of each individual contract and evaluating the cost of reservation fees
16 associated with each type of supply and its corresponding bid, the Company
17 makes a "best cost" decision on which type of supply and supplier to fulfill its
18 needs.

19 **Q. Please summarize any supply arrangements entered into by the Company**
20 **during the review period.**

21 A. During the review period the Company added new seasonal or year around
22 supply utilizing its normal RFP process described earlier.

23 **Q. Please describe the process that Piedmont utilized and the market**
24 **intelligence evaluated during the review period to determine the prices**
25 **charged for off-system sales.**

26 A. The process and information used by Piedmont in pricing off-system sales
27 depends upon the term of the sale, the type of sale and prevailing market

1 conditions at the time of the sale. For long-term delivered sales (longer than
2 one month), Piedmont solicits bids from potential buyers and awards volumes
3 based on the bids received. For short-term transactions (daily or monthly)
4 Piedmont will monitor prices and volumes on Intercontinental Exchange
5 (Intercontinental Exchange or "ICE" is an electronic trading platform where
6 potential buyers post bids and potential sellers post offers at various physical
7 locations), talk to various market participants on the telephone and for less
8 liquid trading points, estimate prices based on price relationships with more
9 liquid points. The Company will also evaluate the amount of supply available
10 for sale and weigh that against current market conditions in formulating its
11 sales strategy (i.e., if Piedmont has a large amount of supply to sell on a
12 particular day and determines that market demand is low, the Company will be
13 more aggressive in its sales strategy. The Company incorporates all these
14 factors and then initiates sales via "ICE" or over the telephone.

15 **Q. Did Piedmont make any changes in its gas purchasing policies or practices**
16 **during the period of review?**

17 A. Piedmont did not implement any changes in its "best cost" gas purchasing
18 policies or practices during the test period.

19 **Q. Did Piedmont's Hedging Plan work properly during the review period?**

20 A. Yes. The Hedging Plan accomplished its goal of providing an additional tool to
21 reduce gas cost volatility to customers in South Carolina that purchase gas from
22 Piedmont.

23 **Q. What were the net economic results of the Hedging Plan during the review**
24 **period?**

25 A. Piedmont's South Carolina customers incurred a net economic cost of
26 \$26,349,590 as a result of Piedmont's hedging plan during the review period.

1 This net economic impact includes expenses incurred in administering the
2 program including commissions, software, subscriptions and data feed.

3 **Q. How did the Company accomplish its goal of reducing gas cost volatility**
4 **when it incurred so much net economic cost?**

5 A. During the past year, as part of the Company's Commission approved hedging
6 plan, the Company purchased call options to provide upside price protection for
7 its customers. A natural gas call option provides the purchaser with the right,
8 but not the obligation, to purchase natural gas at the price specified by the
9 option for a particular period of time. If the market ends up trading at a price
10 above the call option price, the option is exercised and the Company receives
11 the difference between the call option price and the market price the market is
12 trading at when the option is exercised. The Company then uses the proceeds
13 from exercising its call option to offset some of its cost when it purchases its
14 physical supply. As an example, the Company purchases a natural gas call
15 option for January at a strike price of \$8.00 for \$.30. January's NYMEX price
16 ends up closing at \$10.00. The Company exercises its option to purchase gas at
17 the \$8.00 strike price and receives \$2.00 – the difference between its \$8.00 call
18 option strike price and the \$10.00 market closing price. The \$2.00 gain,
19 partially offset by the \$.30 cost of the option, is used to offset the cost of buying
20 \$10.00 gas in the physical market, making the Company's actual cost for
21 physical supply \$8.30.

22 Conversely, the Company also sold puts to help offset some of the
23 cost of purchasing its call options or to provide additional funds to purchase call
24 options with a lower strike price. A natural gas put option provides the
25 purchaser with the right, but not the obligation, to sell natural gas at the price
26 specified by the option for a particular period of time. If the market ends up
27 trading at a price below the put option price, the option is exercised and the

1 Company pays the difference between the put option price and the market price
2 the market is trading at when the put option is exercised. As an example, the
3 Company sells a natural gas put option for January with a strike price of \$6.00
4 and receives \$.20. January's NYMEX price ends up closing at \$4.00. The
5 owner of the put option exercises his right to sell gas at \$6.00 and the Company
6 pays the owner of the put option \$2.00 – the difference between the \$6.00 put
7 option strike price and the market closing price. The \$2.00 loss, partially offset
8 by the \$.20 received for selling the put option, is added to the cost of buying
9 physical supply at \$4.00, making the Company's actual cost for purchasing
10 physical supply \$5.80.

11 By employing this type of strategy the company has reduced the
12 volatility of cost to its customers. If the market price for January closed at
13 \$10.00, the Company's customers would pay \$8.30 for their gas. If the market
14 price for January closed at \$4.00, the Company's customers would pay \$5.80
15 for their gas. This is certainly less volatile than the \$4.00 to \$10.00 the
16 customer would have paid without the Company's use of hedging.

17 In reality both of these circumstances happened during the
18 Company's review period. Natural gas prices peaked during the summer of
19 2009 and the Company had hedges in place to partially offset the high cost of
20 natural gas at that time. During the fall of 2009, and as mentioned earlier in my
21 testimony, prices fell due to the global recession and the increased drilling
22 activity caused by the year's earlier price increase. The net cost of the hedging
23 plan to customers during the review period is influenced by these factors and
24 their timing. The price increase during the review period was much shorter in
25 duration than the price decline and occurred during the summer months when
26 hedging activity and its benefits would be lowest due to customer usage. The
27 global recession and corresponding demand destruction, coupled with the

1 aforementioned increased drilling activity lowered natural gas prices to levels
2 not seen since 2002.

3 **Q. How did the Company decide at what price level to sell puts and thus**
4 **establish a floor price for the cost of its gas supplies?**

5 A. The Company hedges utilizing a plan developed in collaboration with Risk
6 Management Incorporated (RMI). The Company implements hedges when
7 market prices reach attractive levels based upon a matrix composed of 4 years
8 of historical prices developed by RMI. The matrix is broken down into ten
9 percent decile levels, with hedges being implemented for value when future
10 market prices (NYMEX) reach the 50th decile level and lower. If forward
11 prices don't reach the 50th decile level prior to five months before a winter or
12 summer season, the Company will implement hedges on a more limited basis to
13 obtain a reduced level of protection prior to a winter or summer season. The
14 Company did not sell any puts which guaranteed a floor price at or above the
15 50th decile level, where based strictly upon a statistical analysis it would be
16 unwise to guarantee a floor price that was higher than what actually occurred
17 more than 50 percent of the time utilizing the four year historical matrix. For
18 the review period the Company sold puts guaranteeing a minimum price the
19 Company was willing to pay for supply that never exceeded the 30th decile level
20 and was often at or below the 10th decile level. Yet because of the
21 unprecedented conditions described earlier, those guaranteed floor prices are
22 the main reason the hedging plan had a net economic cost during the review
23 period.

24 **Q. Please describe how compliance with the Hedging Plan is monitored.**

25 A. Currently, the Gas Accounting, Finance, and Corporate Compliance areas
26 perform ongoing activities to monitor compliance with the Plan. In addition, on
27 a bi-monthly basis the Energy Price Risk Management Committee (EPRMC)

1 monitors compliance to the Plan. Periodic internal audits have and will be
2 performed to ensure controls continue to be adequate and function as
3 management intends.

4 **Q. Did Piedmont make any changes to the Hedging Plan during the review**
5 **period?**

6 A. Yes. During the review period the Company requested and received from the
7 Commission permission to reduce the hedging plan horizon from twenty-four
8 months to twelve months. The Company requested the reduction due to the
9 increased volatility in the natural gas market and the corresponding increase in
10 carrying costs and relative protection and benefits received from hedges longer
11 than twelve months when measured against their incurred cost.

12 **Q. Have there been any deviations from the Hedging Plan during the review**
13 **period?**

14 A. There were no deviations from the plan during the review period.

15 **Q. Did the Company take any other action to reduce price volatility for its**
16 **customers?**

17 A. The Company utilized storage as a physical hedge to stabilize cost. The
18 Company's Equal Payment Plan and use of the PGA benchmark price and
19 deferred cost accounting also allowed for a smoothing effect on gas price
20 volatility.

21 **Q. What are some of the other steps Piedmont has taken to manage its gas**
22 **costs consistent with its "best cost" policy during the review period?**

23 A. During the past year, Piedmont has taken the following additional steps to
24 manage its gas costs, consistent with its "best cost" policy:

25 (1) Piedmont has, as more fully described in Mr. Williams testimony,
26 actively participated in proceedings before the FERC and other regulatory

1 agencies that could reasonably be expected to affect Piedmont's rates and
2 services;

3 (2) Piedmont has utilized the flexibility available within its supply
4 and capacity contracts to purchase and dispatch gas, release capacity and
5 initiate secondary marketing sales in the most cost effective manner, resulting
6 in South Carolina capacity release and secondary market sales credits of
7 \$5,494,033, a decrease of \$951,372 over the prior year;

8 (3) Piedmont has actively promoted more efficient peak day use of
9 natural gas and load growth from "year-around" markets in order to improve
10 the Company's load factor and reduce average unit costs.

11 **Q. Please summarize your testimony.**

12 A. Piedmont's "best cost" purchasing policy provides the Company with a secure,
13 reasonably priced supply of gas to meet the requirements of its customers. This
14 policy and the Company's practice under this policy have been reviewed and
15 found prudent on all occasions in South Carolina and the other state
16 jurisdictions in which we operate. Although we believe our policies and
17 procedures are reasonable, we are cognizant of the fact that the natural gas
18 industry is rapidly changing, and we are constantly monitoring our policies and
19 procedures to keep up with, and even anticipate, these changing conditions. We
20 have and will continue to meet with the Commission Staff to review current
21 regulations and tariffs and explore possible changes that will better serve
22 natural gas consumers in the future. We are satisfied that our existing policies
23 and procedures are prudent and that they have produced and will continue to
24 produce adequate amounts of reasonably priced gas for our customers.

25 **Q. Does this conclude your testimony?**

26 A. Yes.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the attached *Testimony of Keith P. Maust* is being served this date via email and UPS Overnight (5 copies) upon:

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This the 11th day of June, 2009.

s/ James H. Jeffries IV
James H. Jeffries IV